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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/595,201

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Yoshitaka Nishio

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EXAMINER

LEE, LAURA MICHELLE

ART UNIT

PAPER NUMBER

3724

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/595,201

Applicant(s)

NISHIO ET AL.

Examiner

LAURA M. LEE

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-9, 16-18 and 60-67 is/are pending in the application.
- 4a) Of the above claim(s) 7-9, 16-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 60-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 60, 61, 66, and 67 are objected to because of the following informalities:

Claim 60, line 13, "movable to the Y axis direction" appears meant to be -- moved in the Y axis direction--.

Claim 60, line 15, "moving to the Y axis direction" appears meant to be -- moving in the Y axis direction--.

Claim 61, line 4, moves to the Y axis direction" appears meant to be -- moves in the Y axis direction--.

Claim 64, lines 4-6 recites, "the plurality of belts lowers below the scribing device guide body or emerges above the scribing device guide body from under the scribing device guide body while the first substrate supporting section is moving." As there is no movement of the belts mentioned in the specification, other than a reciprocal movement, it appears that applicant is trying to claim that the plurality of belts is situated between the upper portion of the scribing device guide body and the lower portion of the scribing device guide body. The claims have been interpreted as such, and it is suggested to amend the claim language to -- the plurality of belts being situated between the pair of scribing devices while the first substrate supporting section is moving--.

Claim 66, line 7, "ascribing" should be -- a scribing--.

Claim 66, line 13, the semicolon should be a comma between "scribing device" and "and is configured".

Claim 66, lines 15-16 should be changed from "devices, a method for cutting the substrate for forming a scribing line" to -- devices, and forming a scribing line--.

Claims 66 and 67, should be changed from "A substrate cutting method" to --A substrate cutting system--as no method steps are recited in the claims. This change was discussed with Howard Sobelman on 04/09/2010 and determined to be a typographical error. The claims have been examined as reading on a substrate cutting system. However, on further notice, the words "a method for cutting the substrate for" appear in third to last line of 66, it appears that this is also a typographical error.

Appropriate correction is required.

Claim Rejections - 35 USC § 112 1st paragraph

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 67 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 67 recites, that "the substrate supporting device does not apply any force to the substrate" However, if the substrate is being supported by the supporting device then there are forces being exerted. The weight of the substrate is exerting a force on the supporting device and the supporting device is exerting an equal yet opposite force

on the substrate. It cannot be stated that the substrate support does not exert any force on the substrate and not be in violation of Newton's Third Law of Motion.

Claim Rejections - 35 USC § 112 2nd

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 60-65, 67 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 60, line 12, recites, "wherein the substrate supporting means is placed in both sides of Y axis direction of the pair of scribing devices". It is not understood if applicant means that the substrate supporting means is placed on both sides of a Y axis of the scribing devices or if the applicant is trying to convey that the substrate supporting means is located on both sides of the scribing devices relative to the Y direction?

Claim 61, lines 1-3, recites "wherein the substrate supporting means comprises; a substrate supporting means supported in the scribing device guide body". First, it appears that "in the scribing device guide body" should be --by the scribing device guide body-- as only rollers and a conveyor belts are identified in the specification as being a substrate supporting means and they are clearly not in the scribing device guide body. Secondly, it is not understood, if applicant is claiming a second substrate supporting means or only meant to claim that the substrate supporting means as cited in claim 60

is supported by the scribing device guide body? Applicant does not appear to have possession at the time of the original disclose of a second substrate supporting means that both supports the substrate during scribing and is supported by the scribing device body.

Claim 64, lines 1-3, recites that "wherein the plurality of belts is wound around between a frame on a carry-in side of the substrate and a frame on a carry-out side of the substrate. It is not understood what the applicant intends by this statement. Are the belts wound around in a location between the two frames or on the two frames? And if it is the location, then what are the belts wound around and relative to what? Applicant shows that the belts are wound on separate frames on both the carry-in side and carry-out side relative to the scribing unit, but that isn't what is clearly being set forth.

Claim 66, lines 12- 13, recite "wherein in a substrate cutting system that the substrate supporting means is placed on both sides of Y axis direction of the pair of scribing device." The examiner cannot make out what the applicant is trying to claim? The examiner's best guest is that the applicant meant something like -- wherein the substrate supporting means is placed on both sides of pair of scribing devices relative to the Y direction.

Claim 67, lines 2-3, recites that "the substrate supporting means support the substrate so that the substrate supporting means does not movably contact with the substrate." It is not accurate to say that the substrate supporting means does not movably contact with the substrate as during movement of the supporting means there is contact between the substrate and support. Is the applicant trying to say that the

there is no movement of the substrate relative to the supporting means? This isn't true that is no relative movement as the substrate will be moved off the supporting means eventually. It isn't clear what applicant is trying to convey.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 60-61, 65 and 66-67 are rejected under 35 U.S.C. 102(b) as being anticipated by Ueyama et al. WO02/057192), herein referred to as Ueyama; see Publication 2004/0040997 for English translation. As best understood, Ueyama discloses a substrate cutting system (figure 17), comprising: a pair of scribing line forming means (scribing portions 42/43; fig. 18) arranged facing each other (fig. 18); a pair of scribing devices (cutter wheel chips 51/51) for supporting the pair of scribing line forming means such that one of the pair of scribing line forming means moves on a first surface of a substrate in an X axial direction (along rails 44 of portion 42) and the other of the pair of scribing line forming means moves on a second surface of the substrate in the X axial direction (along rails 44 of portion 43) ; a scribing device guide body (supporting member 50) for supporting the pair of scribing devices (51/51) such that the pair of scribing devices moves in a Y axial direction (arrow 71); and a substrate supporting means (upstream/downstream tables 5b/6b) for supporting the substrate in

an X-Y plane such that the pair of scribing forming line means scribes the first surface of the substrate and the second surface of the substrate.

where the substrate supporting means (5b/6b) is placed in both sides of Y axis direction of the pair of scribing devices; and is configured to be relatively movable to the Y axis direction relative to the substrate, and wherein the pair of scribing devices (51/51) forms a scribing line by moving in the Y axis (arrow 71 / arrow J; paragraph [0107]) direction relative to the substrate in conjunction with the substrate supporting device (Figure 19).

In regards to claim 61, as best understood, Ueyama discloses a substrate supporting means (5b/6b) supported by the scribing guide body (50; see figure 18), wherein the substrate supporting means moves in the Y axis direction (arrows J/ 71) in conjunction with the pair of scribing devices (51/51); and a fixing device for fixing the substrate in the X-Y plane (holding apparatus 58).

In regards to claims 65, the material being cut has no bearing on the patentability of the claims as it is not a structural limitation. Therefore, although Ueyama discloses cutting a mother substrate (8), it only need to be capable of performing this function.

In regards to claim 66, Ueyama discloses a substrate cutting system (figure 17), comprising: a pair of scribing line forming means (scribing portions 42/43; fig. 18) arranged facing each other (fig. 18); a pair of scribing devices (cutter wheel chips 51/51) for supporting the pair of scribing line forming means such that one of the pair of scribing line forming means moves on a first surface of a substrate in an X axial direction (along rails 44 of portion 42) and the other of the pair of scribing line forming

means moves on a second surface of the substrate in the X axial direction (along rails 44 of portion 43) ; a scribing device guide body (supporting member 50) for supporting the pair of scribing devices (51/51) such that the pair of scribing devices moves in a Y axial direction (arrow 71); and a substrate supporting means (upstream/downstream tables 5b/6b) for supporting the substrate in an X-Y plane such that the pair of scribing forming line means scribes the first surface of the substrate and the second surface of the substrate, where the substrate supporting means (5b/6b) is placed in both sides of Y axis direction of the pair of scribing devices, and is configured to be relatively movable to the Y axis direction relative to the substrate in conjunction with the pair of scribing devices (51/51; fig. 18/19), and wherein the pair of scribing devices (51/51) forms a scribing line by moving in the Y axis (arrow 71 / arrow J) direction relative to the substrate in conjunction with the substrate supporting device (Figure 19; paragraph [0107]).

In regards to claim 67, as best understood, Ueyama discloses the substrate supporting means (5b/6b) support the substrate so that the substrate supporting means does not movably contact with the substrate, and so that the substrate supporting means does not apply force to the substrate.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 62-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueyama et al. WO02/057192), herein referred to as Ueyama; see Publication 2004/0040997 for English translation in view of Cunningham (U.S. Patent 6,202,524). Ueyama discloses that the substrate can be moved in to position utilizing upstream and downstream motorized tables 5b and 6b, but does not disclose a series of belts to support the movement of the substrate. However, attention is directed to the Cunningham glass positioning system which utilizes a series of belts to move the glass sheet into the desired position relative to the cutting device which can be retrofitted on existing cutting tables. As belts are a well known conveying means and as shown by Cunningham to be established as a means of transferring glass to and from a cutting head assembly 60, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the Ueyama conveyors to be belt conveyors as taught by Cunningham as both systems allow for the transport and positioning of the glass workpiece relative to the cutter system.

In regards to claim 63, the modified device of Ueyama discloses at least one rotation transmission means (common drive; col. 3, lines 28-30) for circling the plurality of belts in accordance with the movement of the scribing guide body.

As best understood, in regards to claim 64, Ueyama discloses wherein the plurality of belts (conveyor belts; Cunningham 54) is wound around between a frame on a carry-in side of the substrate and a frame on a carry-out side of the substrate, and the plurality of belts lowers below the scribing device guide body or emerges above the

scribing device guide body from under the scribing device guide body while the first substrate supporting section is moving (the belts are between the pair of scribing devices).

Response to Arguments

10. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. If claim 66 was actually intended to be a method claim, then the limitations need to be addressed as providing the features and the actions as steps performed.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAURA M. LEE whose telephone number is (571)272-8339. The examiner can normally be reached on Monday through Friday, 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Laura M Lee/
Examiner, Art Unit 3724
04/08/2010